A.D. 1872, *22nd February.* N° 575.

SPECIFICATION

OF

WILLIAM CAMERON SILLAR
AND
ROBERT GEORGE SILLAR.

TREATING SEWAGE.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.

Price 4d.

1872.

A.D. 1872, 22*nd* FEBRUARY. N° 575.

Treating Sewage.

LETTERS PATENT to William Cameron Sillar, of Blackheath, in the County of Kent, Merchant, and Robert George Sillar, of Bolton, in the County of Lancaster, Gentleman, and Christopher Rawson, of No. 1, Saint Swithin's Lane, in the City of London, General Manager of the Native Guano Company (Limited), for the Invention of "IMPROVEMENTS IN TREATING AND DEODORIZING HUMAN EXCRETA, AND THEREBY FACILITATING THE DISPOSAL AND UTILIZATION THEREOF."

Sealed the 21st June 1872, and dated the 22nd February 1872.

PROVISIONAL SPECIFICATION left by the said William Cameron Sillar, Robert George Sillar, and Christopher Rawson at the Office of the Commissioners of Patents, with their Petition, on the 22nd February 1872.

We, WILLIAM CAMERON SILLAR, of Blackheath, in the County of Kent, Merchant, and ROBERT GEORGE SILLAR, of Bolton, in the County of Lancaster, Gentleman, and CHRISTOPHER RAWSON, of No. 1, Saint Swithin's Lane, in the City of London, General Manager of the Native

Guano Company (Limited), do hereby declare the nature of the said Invention for "IMPROVEMENTS IN TREATING AND DEODORIZING HUMAN EXCRETA, AND THEREBY FACILITATING THE DISPOSAL AND UTILIZATION THEREOF," to be as follows:—

Our Invention relates to the treatment of human excreta or night soil collected in privies, cesspits, dry closets or otherwise than by water carriage. One of the chief difficulties attending the disposal of such night soil or excreta is the nuisance ordinarily inseparable from the collection and removal of the same. Various plans for deodorizing night soil or excreta have been tried, but they are either imperfect or inconvenient. Thus ashes are sometimes mixed with excreta, but do not deodorize and absorb them. Earth is sometimes used as a deodorant, but its use in towns is attended by great practical difficulties. Now the objects of our Invention are not only to deodorize and absorb human feces and urine, but to do this in such a way as to improve their manurial qualities.

Our said Invention consists in the use of what is known as native guano, or of any of the mixtures of substances (herein-after termed the "A. B. C. mixtures") used in the manufacture of the native guano, or of mixtures of the said native guano, and any of the A. B. C. mixtures for deodorizing and absorbing human excreta or night soil.

"Native guano" is the precipitate obtained by treating sewage with the said A. B. C. mixtures, as described in the Specifications of Letters Patent, No. 1954, A.D. 1868, and Nos. 364, 679, 1354, and 3399, A.D. 1870, which Patents are the property of the Native Guano Company (Limited), the subject matters of the said Patents constituting the process known as the "A. B. C. process." The way in which we use the said native guano or the said mixtures (which we will term "deodorants") for the purposes herein-before mentioned, depends upon the way in which the excreta are collected.

Where the excreta are collected in the ordinary way in privies the deodorant or deodorants may be strewed over the said excreta from time to time in sufficient quantity to cover them.

Where the excreta are collected according to the system described in the

W. C. & R. G. Sillar & Rawson's Improvements in Treating Sewage.

Specification of Letters Patent granted to one Nicolas Goux, and bearing date 20 February, A.D. 1868 (No. 566), the deodorant or deodorants is or are used instead of earth, sawdust, or other matters to line the receptacle in which the excreta are collected.

Where the excreta are collected in what are termed "dry closets" the deodorant or deodorants is or are used in substitution for the dry earth or other matter which is usually distributed over the excreta, and where the receptacles used in such closets are divided into two compartments, so as to separate the feces from the urine, the deodorant or deodorants is or are distributed over the said feces by any suitable means, and is or are also put into the compartment in which the urine is collected, so as to absorb the latter.

The mixture of excreta and deodorant or dedorants, when removed from the privies or other receptacles, is made into heaps (with or without the further addition of native guano) and allowed to stand. In due time the mixture becomes a homogeneous mass, which is a valuable and inoffensive manure.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said William Cameron Sillar, Robert George Sillar, and Christopher Rawson in the Great Seal Patent Office on the 22nd August 1872.

TO ALL TO WHOM THESE PRESENTS SHALL COME, we, William Cameron Sillar, of Blackheath, in the County of Kent, Merchant, and Robert George Sillar, of Bolton, in the County of Lancaster, Gentleman, and Christopher Rawson, of No. 1, Saint Swithin's Lane, in the City of London, General Manager of the Native Guano Company (Limited), send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twenty-second day of February, in the year of our Lord One thousand eight hundred and seventy-two, in the thirty-fifth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto us, the said William Cameron Sillar, Robert

W. C. & R. G. Sillar & Rawson's Improvements in Treating Sewage.

George Sillar, and Christopher Rawson, Her special licence that we, the said William Cameron Sillar, Robert George Sillar, and Christopher Rawson, our executors, administrators, and assigns, or such others as we, the said William Cameron Sillar, Robert George Sillar, and Christopher Rawson, our executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "IMPROVEMENTS IN TREATING AND DEODORIZING HUMAN EXCRETA, AND THEREBY FACILITATING THE DISPOSAL AND UTILIZATION THEREOF," upon the condition (amongst others) that we, the said William Cameron Sillar, Robert George Sillar, and Christopher Rawson, our executors or administrators, by an instrument in writing under our or their hands and seals, or under the hand and seal of one of us or them, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said William Cameron Sillar, on behalf of myself and the said Robert George Sillar and Christopher Rawson, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof, that is to say :—

Our Invention relates to the treatment of human excreta or night soil collected in privies, cesspits, middens, dry closets or otherwise than by water carriage or sewers. One of the chief difficulties attending the disposal of such night soil or excreta is the nuisance ordinarily inseparable from the collection, removal, and storing of the same. Various plans for deodorizing night soil or excreta have been tried, but they are either imperfect or inconvenient. Thus ashes are sometimes mixed with excreta, but do not deodorize and absorb them. Earth is sometimes used as a deodorant, but its use in towns is attended by great practical difficulties. Now the objects of our Invention are not only to deodorize and absorb human feces and urine, but to do this in such a way as to facilitate their use as a manure.

Our said Invention consists in the use of what is known as native

guano for deodorizing, absorbing, and decomposing human excreta or night soil.

"Native guano" is the precipitate obtained by treating sewage with deodorizing mixtures as described in the Specifications of Letters Patent, No. 1954, A.D. 1868, and Nos. 364, 1354, and 3399, A.D. 1870, which Patents are the property of or held in trust for the Native Guano Company (Limited), the subject matters of the said Patents constituting the process known as the A. B. C. process. The way in which we use the said native guano for the purposes herein-before mentioned depends upon the way in which the excreta are collected.

Where the excreta are collected in the ordinary way in privies or middens the "native guano" may be strewed over the said excreta from time to time in sufficient quantity to cover them.

Where the excreta are collected according to the system described in the Specification of Letters Patent granted to one Nicolas Goux, and bearing date 20th February 1868 (No. 566), the "native guano" is used instead of earth, sawdust, or other matters to line the receptacle in which the excreta are collected.

Where the excreta are collected in what are termed "dry closets," the "native guano" is used in substitution for the dry earth or other other matter which is usually distributed over the excreta, and where the receptacles used in such closets are divided into two compartments so as to separate the feces from the urine, the "native guano" is distributed over the said feces by any suitable means, and is also put into the compartment in which the urine is collected so as to absorb the latter.

The mixture of excreta and "native guano" when removed from the privies or other receptacles is made into heaps (with or without the further addition of "native guano") and allowed to stand. In due time the mixture becomes a homogeneous mass, which is a valuable and inoffensive manure which we term "native manure."

Having now described the nature of our Invention, and the manner in which the same is to be performed, we claim as our said Invention the use of the substance known as "native guano" for deodorizing, absorb-

ing, and decomposing human excreta or night soil (as distinguished from sewage), essentially as herein-before described.

In witness whereof, I, the said William Cameron Sillar, have hereunto set my hand and seal, this Twenty-second day of August, in the year of our Lord One thousand eight hundred and seventy-two.

W. C. SILLAR. (L.S.)

Witness,
H. H. MURDOCH,
7, Staple Inn,
London.

LONDON:
Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1872.